

REMARKS

Initially, Applicants would like to thank the Examiner for granting the telephone interview on September 14, 2004, and allowing Applicants to file this supplemental reply to the final Office Action dated May 26, 2004 in view of the Advisory Action dated September 1, 2004.

In the final Office Action, the Examiner maintained all four rejections. Applicants subsequently submitted a response on August 17, 2004. In view of the response, the Examiner withdrew two rejections but maintained the other two.

First, the Examiner maintained the "indefiniteness" rejections of claims 4, 5, 7, 8, 12, 14, 15, and 17, which cite certain SEQ ID NOs. According to him, "[i]n the sequence listing of elected SEQ ID NOs: 20, 35, 38, 39, 49, and 50, there are ambiguity codes such as K meaning G or T/U as well as other codes. However, the claims are indefinite as to whether they are intended to encompass a mixture of primers for the primers with ambiguity codes or a single primer with one of the two sequences." See the final Office Action, page 7, lines 16-19. In the response mailed August 17, 2004, Applicants pointed out that, according to the Specification, each of the listed sequences represents one particular compound instead of a mixture. The Examiner countered that "the claim must clearly indicate it is a single compound or a mixture of compounds." See the Advisory Action, page 2, line 6. During the above-mentioned interview, Applicants' counsel proposed amending independent claims 4, 7, and 12 to specify that each listed sequence represent a single compound. The Examiner agreed.

Second, the Examiner maintained the "obviousness" rejection of claims 4, 5, 7, 8, 12, 14, 15, and 17-26 over Grondahl et al., J. Clin. Microbiol., 1999, 37(1):1-7 ("Grondahl") in view of Echevarria et al., J. Clin. Microbio., 1998, 36(5): 1388-1391 ("Echevarria"), Osiowy et al., J. Clin. Microbio. 1998, 36:3139-3154 ("Osiowy"), Zuckerman et al., J. Virol. Methods, 1993, 44:35-44 ("Zuckerman"), Buck et al., Biotechniques, 1999, 27(3): 528-536 ("Buck"), U.S. Patent 5,374,717 to Rota et al., ("Rota"), and 6 GenBank Accession Numbers, i.e., X55803, X57559, M18759, M73260, M11486, and M12594. The rejected claims, drawn to nucleic acid sets, recite one or more of SEQ ID NOs: 1-57. According to the Examiner, (i) Rota and the 6 GenBank Accession Numbers teach sequences that cover these SEQ ID NOs; and (ii) Buck supports that

all nucleic acids selected from the prior art sequences would be expected to function as primers. As such, he concluded that “[i]t would be prima facie obvious to one of ordinary skilled in the art ... to combine [Grondahl, Echevarria, Osiowy, and Zuckerman and to select primers] from the sequences of GenBank and U.S. Patent 5,374,717” to make SEQ ID NOs: 1-57. In other words, Examiner believes that the cited references suggest a genus of nucleic acid sets that encompasses the claimed nucleic acid sets, thereby rendering the claims obvious.

In the response to the final Office Action, Applicants pointed out that “[t]he fact that a claimed species or subgenus is encompassed by a prior art genus is not sufficient by itself to establish a prima facie case of obviousness. ... Some motivation to select the claimed species or subgenus must be taught by the prior art.” MPEP § 2144.08. Also, Applicants showed that even if one skilled in the art would have combined the cited references, he or she would have to choose the claimed nucleic acid sets from an astronomical number of candidates. Since the cited references do not provide “[any] motivation to select the claimed [nucleic acid set] species or subgenus” from such an enormous number of candidates, they do not render the claims obvious.

In the Advisory Action, the Examiner asserted that “[Applicants’] argument is not persuasive because every member of the genus would be expected to function and are implicit and disclosed by the prior art.” Nonetheless, he indicated that he would reconsider the claims if Applicants could present a declaration showing that one member of a prior art genus would not function, i.e., not every member of the genus would function.

Applicants submit herewith a Declaration by Dr. Chi-Horng Bair (“Exhibit A”). As shown in the Declaration, a pair of primers ADV-f1 and ADV-f2 successfully amplified specific products from all Adenovirus samples tested. These primers have sequences from the Adenovirus genome and are covered by the claims. In contrast, FP-F and FP-R, a pair of primers having different sequences from the same Adenovirus genome, failed to amplify specific products from most samples. Clearly, contrary to the Examiner’s belief, not every member of the genus would function.


CONCLUSION

Applicants submit that the grounds for the rejection asserted by the Examiner have been overcome, and that claims, as pending, define subject matter that is definite and non-obvious. Thus, it is submitted that allowance of this application is proper, and early favorable action is solicited.

Enclosed please find a Petition for Three-Month Extension of Time with the required fee of \$490 and a Notice of Appeal with the required fee of \$170. Please apply any other charges to deposit account 06-1050, referencing attorney docket 12674-006001.

Respectfully submitted,

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